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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/682,592	10/08/2003	Gregory T. Thompson	9415-9062	9770

7590 11/04/2004

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EXAMINER


NGUYEN, THU V

ART UNIT PAPER NUMBER

3661

DATE MAILED: 11/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/682,592	Applicant(s) THOMPSON ET AL. 	
	Examiner Thu Nguyen	Art Unit 3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-37, 39-55 and 57-59 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-37, 39-55 and 57-59 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/6/3/04; 10/03</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The preliminary amendment filed on October 8, 2003 and October 12, 2004 have been entered. By the second preliminary amendment, claims 1-17, 38, and 56 have been canceled, claims 57-59 have been added and claims 18-37, 39-55, 57-59 are now pending in the application.

Specification

1. The disclosure is objected to because of the following informalities:

In the specification page 1, lines 19-23; page 11, lines 9-11, the blank portions indicated by “_____” should be filled with appropriate information.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 18-24, 26, 28-34, 36, 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito et al (JP 11-078656) (using Saito et al (US 6,208,249) as translation) in view of Sakai et al (US 6,253,133) (enclosed IDS) and further in view of Weib (DE 198 26 391) (enclosed IDS).

As per claim 18, 22-23, Saito teaches a vehicle passenger detection system. The system comprises: an occupant detection sensor operable to transmit energy into the seating area (col.12, lines 14-19; col.18, lines 31-38); Saito does not explicitly disclose a moisture resistant cover adjacent to the sensor. However, Sakai notes the effect of moisture on the accuracy of the sensor (col.10, lines 37-43), and Weib teaches placing a moisture resistant cover to the sensor (col.2, lines 3-10). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to place the moisture resistant cover adjacent to the sensor of Saito in order to enhance accuracy in detecting the passenger position as suggested by the combined teaching of Sakai and Weib.

As per claim 19-21, Saito teaches including electrodes in the occupant detection sensor (col.11, lines 61-67). Further, placing a suitable number of electrodes in detecting passenger position, and using plastic cover as moisture resistance textile would have been both well known and obvious design choice.

As per claim 24, Saito teaches implementing the sensor in a seat and connecting the sensor with an airbag control system (col.15, lines 60-63; col.12, lines 29-33).

As per claim 26, Saito teaches connecting the sensor to a seat cushion (col.11, lines 61-67; col.12, lines 1-13). Further, using a cushion made of soft insulator material would have been well known.

As per claim 28-34, 36, 39, refer to claims 18-24, 26 above.

4. Claims 25, 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito et al (JP 11-078656) (using Saito et al (US 6,208,249) as translation) in view of Sakai et al (US 6,253,133) and further in view of Weib (DE 198 26 391) (enclosed IDS) and Okamura et al (US 6,490,515).

As per claim 25, 35, Okamura teaches a moisture sensor for detecting wet seat (col.4, lines 43-48). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to implement a well known moisture sensor adjacent to the system of Saito order to detect moisturizing status of the seat. Further, as to claim 35, implementing a well known moisture sensor on either side from the cover would have been both well known and obvious design choice.

5. Claims 27, 37, 40-55, 57-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito et al (JP 11-078656) (using Saito et al (US 6,208,249) as translation) in view of Sakai et al (US 6,253,133) and further in view of Weib (DE 198 26 391) (enclosed IDS) and Ekman et al (US 5,927,817).

As per claim 27, 37, Ekman teaches including at least one aperture at a low portion of an upper surface of the cushion (col.3, lines 58-60); moreover, implementing the aperture at a specific location where liquid tends to be accumulated requires only routine skill in the art. It

Art Unit: 3661

would have been obvious to a person of ordinary skill in the art at the time the invention was made to open an aperture at the low point of the cushion near the sensor of Saito in order to facilitate quick draining of liquid to prevent soaking of water to the sensor.

As per claim 40-42, 45, 47, 49-50, 52, 54-55, 57-59, refer to claims 18 and 27, 26, 19 above.

As per claim 43-44, 48, 51, Ekman teaches a plurality of apertures 26 (fig.3).

As per claim 46, 53, using a weight sensor embedded in the seat cushion for detecting occupancy would have been well known.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

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or faxed to:

(703) 305-7687, (for formal communications intended for entry)

Or:

(703) 305-7687 (for informal or draft communications, please label

"PROPOSED" or "DRAFT")

Art Unit: 3661

Hand-delivered responses should be brought to Crystal Park V, 2451

Crystal Drive, Arlington. VA., Seventh Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Nguyen whose telephone number is (703) 306-9130. The examiner can normally be reached on Monday-Thursday from 8:00 am to 6:00 pm ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black, can be reached on (703) 305-8233. The fax phone number for this Group is (703) 305-7687.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1111.



THU V. NGUYEN
PRIMARY EXAMINER

October 29, 2004